ABSTRACT OF THE DISCLOSURE

A torque sensor is provided with a torsion bar, first and second elongate sleeves respectively secured to one and the other ends of the torsion bar, and a pair of resolvers respectively mounted on the first and second elongate sleeves. First and second stop portions are provided respectively at overlapping portions of the first and second elongate sleeves where the second elongate sleeve is fit partly on the external surface of the first elongate sleeve with a play. A rotary sleeve given to one of the resolvers is press-fit on the external surface of the stop portion provided on the second elongate sleeve for mounting one of the resolvers thereon as well as for reinforcing the mechanical strength of the stop portion provided on the second elongate sleeve. Further, the resolvers used therein are chosen as those respectively having n-poles and m-poles. Where the torsional angle of the torsion bar is represented by symbol "θ", the first and second stop portions are constructed to satisfy an expression ($\theta < 180 \cdot |\ 1\ /\ n - 1\ /\ m\ |$). The torsional angle of the torsion bar is limited to being smaller than the angle determined by the expression, and hence, the resolvers are prevented from having the same values in their electrical angles, so that incorrect detection in torque can be obviated.